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A STUDY OF ADMINISTRATIVE COSTS IN SELECTED SCHOOL DISTRICTS OF IOWA, MISSOURI, AND SOUTH DAKOTA.

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A STUDY WAS CONDUCTED TO DETERMINE AND ANALYZE THE COSTS OF CENTRAL ADMINISTRATION OF PUBLIC SCHOOLS IN SOUTH DAKOTA, IOWA, AND MISSOURI FOR THE SCHOOL YEAR 1965-66. THIRTY SCHOOL DISTRICTS IN EACH OF THE 3 STATES (10 LARGEST, 10 MEDIAN, 10 SMALLEST) WERE INCLUDED AS THE SAMPLE POPULATION. THE PER PUPIL COSTS FOUND IN THIS STUDY SUPPORT THE ORIGINAL ASSUMPTION THAT SMALL SCHOOL DISTRICTS HAVE GREATLY INCREASED PER CAPITA EXPENSE FOR CENTRAL ADMINISTRATION. FROM THE FINDINGS OF THIS STUDY, IT IS RECOMMENDED THAT IN EACH OF THE 3 STATES MORE AUTHORITY BE GIVEN BY LAW TO THE STATE EDUCATION AGENCY FOR PLANNING AND DIRECTING REORGANIZATION OF ALL SCHOOL DISTRICTS. AFTER REORGANIZATION, BASIC ADMINISTRATIVE SCHOOL DISTRICTS SHOULD HAVE A MINIMUM OF 3,000 TO 5,000 PUPILS. A FINAL RECOMMENDATION WAS THAT ALL INVOLVED WITH PUBLIC SCHOOLS SHOULD MAKE A MORE THOROUGH COST-ANALYSIS OF EDUCATIONAL SERVICES THROUGH THE USE OF PER PUPIL COST COMPARISONS. (ES)

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A STUDY OF ADMINISTRATIVE COSTS IN SELECTED SCHOOL DISTRICTS OF IOWA, MISSOURI, AND SOUTH DAKOTA

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FOREWORD

The impact of scientific, technological, social and economic change on the American way of life necessitate a re-examination of the educational system. These changes modify established needs and create new needs to be met by the public school system. Instructional programs and supporting services must be developed to meet these needs.

The primary purposes of school district organization are to make possible: (1) the desired quality or excellence of the programs and services; (2) the efficiency of the organization for providing the programs and services; and, (3) the economy of operation, or the returns received for the tax dollar invested in education.

Increasing concern is being expressed by legislators, business and industrial representatives interested in education, and many others concerning the increasing costs of education. Questions are being raised with regard to the quality of the educational programs and services, and concerning returns received for the tax dollar invested. And, more specifically, information is requested pertaining to the relationship between school district organization and educational expenditures. Dr. Richard P. Manatt and Dr. Anton J. Netusil, Iowa State University, Ames, Iowa, were invited to analyze one aspect of this problem - the relationship between administrative costs and school district organization. This paper is a report of their investigation.

The writers were commissioned to complete this study for the four states which are members of the Great Plains School District Organization Project. Unfortunately, it was discovered that the statistics for Nebraska were inaccurate and could not be used, since the data reporting system in this state did not provide compatable information. Regretfully, all tables and comparative data pertaining to Nebraska were deleted.

The value of the statistics and data contained in this report is dependent upon its utilization by those with advisory and/or decision making responsibilities about the educational structure in each state. It represents a beginning point for further study and evaluation, and for establishing criteria upon which guidelines can be developed for effective and constructive school district organization.

Respectfully submitted,

Ralph D. Purdy, Director
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PART ONE

Introduction

One of the economies expected from large-enrollment public school districts is that of reduced administrative cost. When per pupil costs are considered, it is assumed that administrative expense, especially that of central office services, will decline with increased enrollment. Determining exactly how much administrative cost economy to expect from larger districts had been difficult in the past because of reporting procedures to the state education agency, variations in accounting systems among states, classification procedures (e.g., building principals' salaries lumped together in "General Administration"), and an understandable reluctance on the part of some superintendents to be compared, on a per capita cost basis, with other systems.

The purpose of this study was to determine whether there were significant differences in per pupil costs of central office administration of districts in South Dakota, Nebraska,[1] Iowa and Missouri. This investigation of costs was contracted research for the Great Plains School District Organization Project, Dr. Ralph Purdy, Director.

The Problem

The general problem of the investigation was the determination and analysis of costs for the central administration of public school districts in South Dakota, Iowa, and Missouri for the school year 1965-1966. More specifically the problem was to answer the following questions:

1. What were the costs of school district central administration excluding costs of administering attendance units?

2. What are the component costs of district central administration?

3. How do these costs vary per capita (per pupil) among districts and between states?

4. What is the relationship of district central administrative services offered to district size?

5. Insofar as can be determined, does efficiency (i.e., reduction of per pupil costs) continue to increase as district enrollments mount or is there an "administrative over-burden" present in very large districts which diminishes administrative economy?

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[1] It was necessary to eliminate all data from Nebraska, since the reporting system used in that state did not provide compatable information with that received from the other three states. However, it should be noted that comparable data is being provided for the 1967-68 fiscal year.

6. Is a broad range of administrative services generally available to all districts or are special services, educational supervisors, and administrative specialists found only in larger districts -- in high-cost districts?

Delimitations

This study was delimited to include only approved, public-school districts maintaining grades K-12 during the 1965-66 school year in the states of South Dakota, Iowa, and Missouri. The study dealt only with district central administrative costs; excluded were costs for principals, counselors, and secretaries of attendance units. The assumption was made that attendance unit administration (of a single elementary or high school building) would be necessary and relatively constant no matter what district sizes were produced by reorganization.

Furthermore, administrative costs were defined as salaries, fringe benefits, and personal expenses; costs for office equipment, supplies, and fixed costs were excluded. Official archival reports to the state education agency (SEA) were assumed to be accurate; however where data were missing on Secretaries'Annual Reports, local superintendents were contacted by telephone or by mail questionnaire to assure complete cost figures.

Cost figures were most readily available in Iowa because of the detail provided by report documents to the SEA and the use of electronic data processing. South Dakota and Missouri state education did not demand quite the detail found in the Iowa Secretary's Annual Report, nor were all data in machine-useable form in these states. Therefore, the operational decision was made to include for detailed analysis only the ten largest districts, ten smallest districts and the ten districts clustered around each state's median enrollment size.

Methods and Procedures

Using the definitions presented in the following section, district central administrative positions were classified into: general administration, administrative secretaries, special service personnel, special service secretaries, educational supervisors, educational supervisor secretaries, Board of Education and secretaries and Business Management. During the fall of 1967 conferences were held with Dr. Ralph Purdy, project director and the project state directors: Dr. Ellis Hanson (Iowa), Arthur Summers (Missouri), and Earl G. Boxa (South Dakota). At that time operational definitions were checked for accuracy in each state, cost-reporting procedures for each state compared and a uniform data sheet was developed as a source document (See Appendix). Numbers of administrators and non-professional personnel were needed for each district as well as exp enditures by class and the full-time district enrollment grades kindergarten through twelve.

Initially, a total survey of all districts was intended. This would have included: Iowa, 455 districts; Missouri, 247 districts; and South Dakota, 215 districts. Unfortunately, a spot check of records in the SEA's of Missouri and South Dakota revealed that only total costs were available and considerable variation existed in the positions defined as "administration". Iowa records were

complete except that secretarial costs were not available as a subtotal. Consequently, the decision was made to work with only thirty districts in each state (ten largest, ten median, and ten smallest). All Iowa districts were to be included in a subsequent study.

Using the data sheets, Iowa costs were obtained from a complete printout of the 1966 Secretary's Annual Report to the Iowa Department of Public Instruction. Numbers, types, and costs of secretaries for Iowa districts were obtained by surveying district superintendents by mail. In the remaining two states a hand-search of financial reports and/or telephone and mail requests to the district superintendents were used.

Data sheets were transferred to cards by keypunch and unit-record equipment and desk calculators were used to produce summary data and per-pupil costs. Analysis of variance techniques indicated that the markedly different costs by size of district were statistically significant.

Finally, rosters of personnel by district were compiled to determine how the types of personnel distributed by district size. Tables were constructed by state and enrollment classes.

Definitions

The following definitions are taken from:

E. B. Sessions. A Study of Administrative Costs in Ohio School Districts. The State Department of Education; Columbus, Ohio. November 3, 1966.

> Basic school administrative district is used to denote a school district in which a single board or officer has the immediate responsibility for the direct administration of all the public schools located therein. Its distinguishing feature is that it is a quasi-corporation with a board or a chief school officer that has the responsibility for, and either complete or partial autonomy in, the administration of all public schools within its boundaries. Included in this definition are all so-called "local school districts," "local school systems," "local school administrative districts," as well as all city, village, and "county-unit" systems. The terms basic administrative districts, basic school districts, and basic administrative units are used synonymously.
>
> An attendance unit comprises the geographical area served by a single school. The territory within which children attending an elementary school reside is an elementary school attendance unit. The territory within which children attending a secondary school reside is a secondary school attendance unit. A school attendance unit, as such, does not possess administrative powers independently of the basic school administrative district of which it is a part. It is not a quasi-corporation. A basic school administrative district may consist of one, two, or three, or a large number of school attendance units.

It should be noted that this investigation is concerned with personnel and

costs of Administrative Districts and not with attendance units. As mentioned in the Sessions definition above, the basic school administrative district is a quasi-municipal corportation which has the responsibility for the administration of all public schools--attendance units--within the district boundaries.

Personnel defined as district central administrators were:

Administration:
1. Superintendent
2. Assistant Superintendents
3. School Board Clerks
4. Business Managers
5. Secretaries

Educational Supervisors:
1. Elementary
   a. Upper Grades
   b. Lower Grades
   c. Primary
2. Secondary
   a. Art
   b. Home Economics
   c. Industrial Arts
   d. Music
   e. Reading
   f. Physical Education
   g. Vocational
   h. Science
   i. Mathematics

Special Services:
1. Guidance
2. Psychologists
3. Speech Therapists
4. Nurses
5. Visiting Teachers
6. Personnel Directors
7. Audio Visual
8. Dentists
9. Doctors
10. Specialists
11. Special Education
12. Adult Education
13. Pupil Accounting
14. Health Services
15. Deaf and Hard of Hearing
16. Librarians
17. Secretaries

As was expected three positions were found in practically every school district--the superintendent, the board secretary, and an office secretary. In very small districts the board secretary and office secretary positions were filled by the same person. The largest districts had one or more persons in each of the positions on the list.

The above listing of the personnel for the district central administration does not include the following:

1. Principals of Attendance Units
2. Assistant Principals of Attendance Units
3. Teachers
4. Custodians
5. Bus Drivers
6. Food Service Personnel
7. Maintenance Personnel
8. Secretaries (Assigned)
9. Counselors of attendance units

These are people who deal with attendance units, and it is assumed that no matter what type of administrative district is established, the personnel listed immediately above will be required at each attendance unit.

PART TWO

Findings

The school districts of Iowa, Missouri, and South Dakota are typically very small. As shown in Table 1 the median enrollments grades K-12 were 714, 693, and 321 respectively. Thus in Iowa, a median-sized district had less

Table 1. Public school districts of Iowa, Missouri, and South Dakota maintaining high schools, 1965-1966.

Number and Size	Iowa	Missouri	South Dakota
No. of Districts	455	247	215
Largest Enrollment	44,954	123,733	18,124
Median Enrollment	714	693	321
Smallest Enrollment	195	96	39

than 55 pupils per grade in 1965-1966. South Dakota still experiences high school graduating classes with less than ten members.[1] Examination of Tables 2-4 reveals that, excepting the major city(ies) of each state, even the classification "ten largest districts" is comprised of a number of schools under 15,000 in size and when Missouri is ignored, most of the schools in the top ten have less than 10,000 students. It should also be noted that the so-called median ten school districts in each state are also very small.

Tables 2-4 contain general administrative costs, i.e., costs for superintendent, assistants, secretaries, business personnel and board of education costs. These tables do not contain costs of special services personnel or educational supervisors.

Per pupil costs of general administration

The per pupil costs contained in Tables 2-4 are the very essence of this report and vividly support the original assumption that small school districts have greatly increased per capita expense for central administration. Iowa's ten largest districts spent about $11.00 per child for central administration during the 1965-1966 year.[2] Median-sized Iowa districts in the state spent

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[1] Dr. Merle Stoneman, for many years before his death professor of Educational Administration at the University of Nebraska, used to tell of giving a commencement address to a western Nebraska school graduating three students. The girl who was salutatorian that year was not admitted to the University because she did not rank in the top half of her graduating class!

[2] Slightly less if Iowa City school district is omitted. This district had recently made considerable improvement in administrative services and staff and had raised the per pupil total to $35.08.

Table 2. Per pupil cost for general administration large, median, and small districts in Iowa, 1965-66.

Rank	District	Enrollment	Cost of Administration	Administrative Cost per pupil
1	Des Moines	44,954	$322,932	$ 7.18
2	Cedar Rapids	23,596	228,490	9.68
3	Davenport	21,592	197,742	9.16
4	Waterloo	19,469	168,623	8.66
5	Sioux City	18,324	114,951	6.27
6	Council Bluffs	15,252	80,228	5.26
7	Dubuque	8,861	91,984	10.38
8	Ottumwa	8,199	82,171	10.02
9	Iowa City	7,870	276,148	35.08
10	Fort Dodge	7,812	81,041	10.37
238	Beaman-Conrad	723	16,056	22.20
239	Holstein	722	12,341	17.00
240	Turkey Valley	719	21,419	29.60
241	Montezuma	717	25,944	36.10
242	Eastwood	714	60,891*	85.00
243	Adair-Casey	713	27,659	38.70
244	Buffalo Center	708	16,196	22.75
245	Twin Cedars	708	16,991	23.90
246	H.L.V.	707	19,546	27.65
247	Underwood	705	19,160	27.10
446	Diagonal	261	12,164	46.10
447	Ayrshire	261	12,106	46.20
448	Marathon	243	12,690	51.90
449	Garrison	237	7,727	32.50
450	Palmer	236	8,956	37.90
451	New Providence	235	6,530	27.90
452	Steamboat Rock	231	8,292	35.80
453	A.C.L.	226	19,399	85.40
454	Rake	211	8,891	42.10
455	Rembrandt	195	6,317	32.30

*This district has included retirement payments for the entire staff in the administration total.

Table 3. Per pupil cost for general administration large, median, and small districts in Missouri, 1965-1966.

Rank	District	Enrollment	Cost of Administration	Administrative cost per pupil
1	St. Louis	123,733	$970,579	$ 7.84
2	kansas City	79,835	279,845	3.51
3	Springfield	23,805	301,683	12.59
4	Ferguson	16,795	116,546	6.90
5	St. Joseph	16,489	83,800	5.80
6	Raytown	15,790	108,674	6.90
7	Independence	14,955	123,688	8.25
8	Ritenour	14,677	141,680	10.05
9	Hazelwood	14,536	141,465	9.76
10	Hickman Mills	12,682	118,118	9.24
238	Albany	749	16,706	22.17
239	Qulin	710	15,762	22.19
240	Milan	706	13,381	18.95
241	Laddonia	697	11,798	16.86
242	Elsberry	693	16,385	29.14
243	North Platte	680	20,135	29.56
244	Rich Hill	668	15,656	23.36
245	Conway	667	13,182	19.70
246	Rock Port	662	21,122	31.82
247	Canton	650	15,897	24.46
476	Hermitage	142	8,159	57.46
477	Williamstown	139	8,598	61.43
478	Dadeville	133	8,650	60.52
479	Gorin	128	10,881	83.85
480	Wyaconda	119	10,208	85.00
481	Coffey	109	7,145	65.01
482	Wheeling	108	8,898	83.33
483	Ravanna	105	8,833	83.81
484	Martinsville	97	9,760	100.62
485	Ethel	96	9,360	97.50

Table 4. Per pupil cost for general administration large, median, and small districts in South Dakota, 1965-1966.

Rank	District	Enrollment	Cost of Administration	Administrative cost per pupil
1	Sioux Falls	18,124	$184,397	$10.17
2	Rapid City	13,369	113,183	8.47
3	Aberdeen	5,967	41,316	6.92
4	Huron	3,980	48,445	12.17
5	Douglas	3,894	86,881	22.31
6	Watertown	3,781	48,335	12.78
7	Mitchell	2,915	47,368	16.25
8	Brookings	2,855	45,280	15.86
9	Pierre	2,763	39,124	14.16
10	Yankton	2,595	46,621	17.97
103	Armour	331	9,081	27.44
104	Bowdle	330	11,132	33.74
105	Herreid	326	4,175	12.81
106	Alexandria	322	11,985	37.22
107	Egan	321	9,997	31.15
108	Hill City	313	7,940	25.37
109	Roscoe	311	7,673	24.67
110	Plankington	309	7,557	24.46
111	Veblen	305	5,223	17.13
112	Tripp	303	6,305	20.81
206	Claremont	111	1,156	10.42
207	Vivian	110	850	7.73
208	Worthing	106	6,890	65.00
209	Glenham	103	1,437	13.95
210	Volin	102	2,507	24.58
211	Oelrichs	93	5,364	57.68
212	Witten	89	3,699	41.56
213	Interior	75	3,332	44.43
214	Bison	72	2,075	28.88
215	Fairview	39	891	22.85

about $33.00 per child for these services. The smallest ten districts spent around $44.00 per child for central administration. A similar pattern of costs was found in each of the states. Median district costs were double or triple those of the ten largest districts.

To simplify comparisons, the per pupil costs of each classification were averaged and presented for all three states. Data in Table 5 concerning the "smallest-ten" classification indicates that small schools were spending amounts from three to almost ten times that of the large-district mean per pupil expenditures. The differences were least in South Dakota, possibly because the median- and smallest-ten classifications were quite similar in size. Furthermore, the

Table 5. Average per pupil costs of administration by size classification, Iowa, Missouri, and South Dakota, 1965-1966.

	Iowa	Missouri	South Dakota
Total no. of districts	455	247	215
Mean cost per pupil			
Largest ten	$11.20	$ 8.08	$13.71
Median ten	33.00	23.82	25.48
Smallest ten	43.80	77.85	31.71

"largest-ten" classification of this state contained seven districts smaller then 5,000. Administration obviously is a part-time assignment in most of the small districts of South Dakota when annual costs as low as $891.31 were reported!

Actual-amount comparisons across state lines can be considered fairly precise in the series of tables 2-5. In some instances sub-totals for secretaries or business managers were not available, but total figures were always available.

Going beyond general administration to costs of educational supervisors and special services personnel proved to be more difficult. In the following series of tables 6-8, the Iowa figures were most complete; they included a special cost break-out for secretaries by administration, supervision or special services, provided by surveying the business officials of the districts involved. Missouri data were equally comprehensive. South Dakota costs for business manager, special services, educational supervisors and secretaries by area could not be obtained.

Inclusion of all central administration costs had a smoothing effect on the distribution of per pupil costs. Large district expenditures for educational supervisors and special services personnel tended to increase unit costs; median and small districts had few expenditures beyond those for general administration. The largest districts still provided a per pupil economy; for example, the Iowa mean per-pupil cost for central administration in the largest ten districts was $35.35; median districts, $78.88; and in small districts the figure was $73.55.

Table 6. Per pupil costs of all central administration, large, median, and small districts in Iowa, 1965-1966.

Rank	District	Enrollment	General* Administration**	Special Services	Educational Supervision	Total Adm. Cost	Total per pupil cost
1	Des Moines	44,954	$345,411	$705,365	$421,173	$1,471,949	$32.74
2	Cedar Rapids	23,596	251,482	376,746	243,695	871,923	36.95
3	Davenport	21,592	197,742	-	-	-	-
4	Waterloo	19,469	192,741	148,488	290,638	631,867	32.46
5	Sioux City	18,324	167,771	220,119	164,236	552,126	30.13
6	Council Bluffs	15,252	114,398	81,596	146,438	342,432	22.45
7	Dubuque	8,861	130,761	135,981	116,438	383,180	43.21
8	Ottumwa	8,199	93,744	103,497	83,865	281,106	34.29
9	Iowa City	7,870	286,797	0	17,853	304,650	38.71
10	Fort Dodge	7,812	130,730	74,056	163,739	368,525	47.17
223	Beaman-Conrad	723	22,056	15,000	103,850	140,906	194.89
224	Holstein	722	16,540	16,300	15,920	48,760	67.53
225	Turkey Valley	719	30,296	10,583	6,512	47,391	65.91
226	Montezuma	717	31,744	15,000	0	46,744	65.19
227	Eastwood	714	67,600	30,499	6,760	104,859	146.86
228	Adair-Casey	713	34,388	16,500	0	50,888	71.37
229	Buffalo Center	708	20,095	10,275	0	30,370	42.90
230	Twin Cedars	708	19,391	10,950	0	30,341	42.85
231	H.L.V.	707	24,146	0	1,350	25,496	36.06
232	Underwood	705	22,160	13,700	10,100	45,960	65.19
446	Diagonal	261	12,164	0	0	12,164	46.60
447	Ayrshire	261	14,805	2,000	0	16,805	64.39
448	Marathon	243	12,689	0	0	12,689	52.22
449	Garrison	237	9,030	830	1,715	11,575	48.84
450	Palmer	236	8,955	0	0	8,955	37.94
451	New Providence	235	6,530	0	0	6,530	27.79
452	Steamboat Rock	231	11,292	5,800	0	17,092	73.99
453	A.C.L.	226	23,799	0	0	23,799	105.31
454	Rake	211	10,279	0	41,220	51,499	244.07
455	Rembrandt	195	6,317	0	0	6,317	32.40

*General administration includes costs of board of education, superintendent and assistants, business managers and all administrative secretaries.

**General administration totals will differ from those presented in Table 2 because Table 2 is taken from the Secretary's Annual Report, July, 1966. Table 7 data are from a mail survey of 1966-67 school year costs (fiscal year v. school year costs).

Table 7. Per pupil costs of all central administration, large, median, and small districts in Missouri, 1965-1966.

Rank	District	Enrollment	General Administration*	Special Services	Educational Supervision	Total Adm. Cost	Total per pupil cost
1	St. Louis	123,733	$979,575	$1,332,816	$653,320	$2,965,711	$23.97
2	Kansas City	79,835	279,845	662,220	867,983	1,810,048	22.67
3	Springfield	23,805	301,683	164,689	77,508	543,880	22.85
4	Ferguson	16,795	166,546	72,000	83,850	322,396	19.20
5	St. Joseph	16,489	83,800	40,500	43,200	167,500	10.16
6	Raytown	15,790	108,674	13,000	190,600	312,274	19.78
7	Independence	14,955	123,688	52,232	30,715	206,635	13.82
8	Ritenour	14,677	141,680	0	82,861	224,541	15.30
9	Hazelwood	14,536	141,465	45,863	36,628	223,956	15.41
10	Hickman Mills	12,682	118,118	70,547	0	188,665	14.88
238	Albany	749	16,706	0	0	16,706	22.30
239	Qulin	710	15,762	0	0	15,762	22.20
240	Milan	706	13,281	0	6,725	20,006	28.34
241	Laddonia	697	11,798	0	0	11,798	17.17
242	Elsberry	693	16,385	0	13,376	29,761	42.95
243	North Platte	680	20,135	0	0	20,135	29.61
244	Rich Hill	668	15,656	0	0	15,656	23.44
245	Conway	667	13,182	9,600	10,400	33,182	49.75
246	Rock Port	662	21,122	0	0	21,122	31.91
247	Canton	650	15,897	0	5,005	20,902	32.16
476	Hermitage	142	8,159	0	0	8,159	57.46
477	Williamstown	139	8,598	0	0	8,598	61.86
478	Dadeville	133	8,650	0	0	8,650	65.04
479	Gorin	128	10,881	0	0	10,881	85.01
480	Wyaconda	119	10,208	0	0	10,208	85.78
481	Coffey	109	7,145	0	0	7,145	66.55
482	Wheeling	108	8,898	0	0	8,898	82.39
483	Ravanna	105	8,833	0	0	8,833	84.12
484	Martinsville	97	9,760	0	0	9,760	100.62
485	Ethel	96	9,360	0	0	9,360	97.50

*Ibid.

Table 8. Per pupil costs of all central administration, large, median, and small districts in South Dakota, 1965-1966.

Rank	District	Enrollment	General Administration*	Special Services	Educational Supervision	Total Adm. Cost	Total per pupil cost
1	Sioux Falls	18,124	$184,398	Not Available	$155,834	$340,232	$18.77
2	Rapid City	13,369	113,184	"	72,758	185,942	13.91
3	Abderdeen	5,967	41,316	"	17,179	58,495	9.80
4	Huron	3,980	48,445	"	9,577	58,022	14.58
5	Douglas	3,894	86,881	"	6,496	93,377	23.98
6	Watertown	3,781	48,336	"	44,026	92,362	24.43
7	Mitchell	2,915	47,368	"	0	47,368	16.25
8	Brookings	2,855	45,280	"	3,313	48,593	17.02
9	Pierre	2,763	39,124	"	0	39,124	14.16
10	Yankton	2,595	46,621	"	70	46,691	17.99
103	Armour	331	9,081	Not Available	0	9,081	27.44
104	Bowdle	330	11,133	"	0	11,133	33.74
105	Herreid	326	4,175	"	6,628	10,803	33.14
106	Alexandria	322	11,986	"	0	11,986	37.22
107	Egan	321	9,998	"	0	9,998	31.14
108	Hill City	313	7,940	"	0	7,940	25.37
109	Roscoe	311	7,674	"	0	7,674	24.68
110	Plankington	309	7,558	"	0	7,558	24.46
111	Veblen	305	5,224	"	4,867	10,091	33.09
112	Tripy	303	6,306	"	0	6,306	20.81
206	Claremont	111	1,157	Not Available	0	1,157	10.42
207	Vivian	110	850	"	0	850	9.73
208	Worthing	106	6,896	"	0	6,896	65.06
209	Glenham	103	1,437	"	0	1,437	13.95
210	Volin	102	2,508	"	1,100	3,608	35.37
211	Oelrichs	93	5,365	"	0	5,365	57.69
212	Witten	89	3,699	"	0	3,699	41.56
213	Interior	75	3,332	"	0	3,332	44.43
214	Bison	72	2,076	"	0	2,076	28.83
215	Fairview	39	891	"	0	891	22.85

*Ibid.

Also of interest was the leveling of per pupil costs within district-size strata. Consider the cases of Iowa City, Iowa and Kansas City, Missouri. When only general administrative costs were considered, Iowa City had a per capita figure much above the other large districts, $35.08, compared to a stratum mean of $11.20. On the other hand, total administrative cost per pupil for this city was $38.71 compared to a large district mean of $35.35.

Similarly, the very low Kansas City general administration per-pupil figure of $3.51 made this district's central office operation appear much more economical than the total per pupil cost of $22.67 reported in Table 7. Differences in budgeting procedures accounted for the rather misleading general administrative costs. Iowa City had higher general administration costs than the typical district of that size classification but no special services costs. Kansas City had relatively modest general administration costs but relatively high educational supervisor costs.

Administrative personnel

As was stated earlier, this investigation is not concerned with the quality of the educational program, but is concerned with the opportunities the pupils have for effective learning in the schools. What central administration is provided? Are educational supervisors employed? How many special services personnel support the district operation? In short, what is obtained for the per pupil expenditure of ten, thirty, or eighty-one dollars?

Tables 9-11 following contain numbers of administrators, educational supervisors, and special services personnel employed by districts in each of the three size classifications. The pattern was generally the same for each state; Ten large districts; a few administrative employees, many more special services personnel and a slightly smaller number of educational supervisors; Median districts; one or two administrators and an occasional special services person or educational supervisor; Ten smallest districts; one administrator, the superintendent, who frequently was teaching part-time and no special services person or educational supervisors.

Obviously pupils enrolled in large districts had access to more varied and complete administrative services. Those who are familiar with the operations of small districts will point out that superintendents of small schools serve part of the time as educational supervisors and work on special services tasks. Furthermore, county and intermediate unit services can be said to supplement the central administration of small districts. Yet those who are acquainted with the administration set-up of the large districts in this study are also quick to point out that superintendents of Des Moines or St. Louis also spend many hours of each work week as special services workers or as educational supervisors (if the same flexible definitions are used). Moreover, in Polk County, Iowa services from the county educational unit are available to Des Moines schools; St. Louis County services are given to St. Louis schools quite as readily as to a small school district in that county.

Parenthetically it should be mentioned that the position title of assistant superintendent or associate superintendent is used only sparingly by the large school districts studied. Many districts as large as Cedar Rapids and Davenport, Iowa or Independence, Missouri had only one assistant superintendent. Many who were thought to actually serve as assistant superintendents were called "directors", "supervisors", or "consultants". Whether for economy of salaries attached, because of out-dated organizational charts, large districts seldom had more than one person

Table 9. Administrators, educational supervisors, and special services personnel of large, median, and small districts in Iowa, 1965-1966.

Rank	District	Enrollment	No. Admin.	No. Spec. Ser. Personnel	No. Educ. Super.	Total
1	Des Moines	44,954	2	44.2	23.5	69.7
2	Cedar Rapids	23,596	2	50.0	14.0	66.0
3	Davenport	21,592	1	-	-	-
4	Waterloo	19,469	2	21.5	11.0	34.5
5	Sioux City	18,324	2	25.3	9.5	35.8
6	Council Bluffs	15,252	2	8.6	11.0	21.6
7	Dubuque	8,861	2	10.5	9.0	21.5
8	Ottumwa	8,199	1	14.0	6.0	21.0
9	Iowa City	7,870	2	0	0	2.0
10	Fort Dodge	7,812	2	9.6	19.8	31.4
238	Beaman-Conrad	723	1	2.0	15.0*	18.0
239	Holstein	722	1	2.0	1.0	4.0
240	Turkey Valley	719	1	2.3	0	3.3
241	Montezuma	717	1	2.6	0	3.6
242	Eastwood	714	1	4.0	0	5.0
243	Adair-Casey	713	1	3.3	0	4.3
244	Buffalo Center	708	1	1.6	0	2.6
245	Twin Cedars	708	1	1.5	0	2.5
246	H.L.V.	707	1	0	0	1.0
247	Underwood	705	1	2.0	1.0	4.0
446	Diagonal	261	1	1.0	3.0	5.0
447	Ayrshire	261	1	0.3	0	1.3
448	Marathon	243	1	-	-	-
449	Garrison	237	1	0.5	0	1.5
450	Palmer	236	1	-	-	-
451	New Providence	235	1	0.7	0	1.7
452	Steamboat Rock	231	1	0.8	0	1.8
453	A.C.L.	226	1	0.5	0	1.5
454	Rake	211	1	0	6.0	7.0
455	Rembrandt	195	1	-	-	-

*Obviously classroom teachers -- the total staff of the district numbers 421.

Table 10. Administrators, educational supervisors, and special services personnel of large, median, and small districts in Missouri, 1965-1966.

Rank	District	Enrollment	No. Admin.	No. Spec. Ser. Personnel	No. Educ. Super.	Total
1	St. Louis	123,733	18	58	63	139
2	Kansas City	79,835	6	48	16	70
3	Springfield	23,805	4	22	9	35
4	Ferguson	16,795	5	6	9	20
5	St. Joseph	16,489	4	10	5	19
6	Raytown	15,790	6	15	22	43
7	Independence	14,955	4	6	4	14
8	Ritenour	14,677	6	0	11	17
9	Hazelwood	14,536	25	4	3	32
10	Hickman Mills	12,682	6	13	0	19
238	Albany	749	1	0	0	1
239	Qulin	710	1	3	0	4
240	Milan	706	2	1	0	3
241	Laddonia	697	1	0	0	1
242	Elsberry	693	1	0	0	1
243	North Platte	680	2	0	0	2
244	Rich Hill	668	1	0	0	1
245	Conway	667	3	3	2	8
246	Rock Port	662	1	0	0	1
247	Canton	650	2	1	0	3
476	Hermitage	142	1	0	0	1
477	Williamstown	139	1	0	0	1
478	Dadeville	133	1	0	0	1
479	Gorin	128	1	0	0	1
480	Wyaconda	119	1	0	0	1
481	Coffey	109	1	0	0	1
482	Wheeling	108	1	0	0	1
483	Ravanna	105	1	0	0	1
484	Marinsville	97	1	0	0	1
485	Ethel	96	1	0	0	1

Table 11. Administrators, educational supervisors, and special services personnel of large, median, and small districts in South Dakota, 1965-1966.

Rank	District	Enrollment	No. Admin.	No. Spec. Ser. Personnel	No. Educ. Super.	Total
1	Sioux Falls	18,144	1	None reported	16	17
2	Rapid City	13,369	1	"	7	8
3	Averdeen	5,967	1	"	1	2
4	Huron	3,980	1	"	1	2
5	Douglas	3,984	1	"	1	2
6	Watertown	3,781	1	"	5.2	6.2
7	Mitchell	2,915	1	"	4	5
8	Brookings	2,855	1	"	2	3
9	Pierre	2,763	1	"	0	1
10	Yankton	2,595	1	"	0	1
103	Armour	331	.8	None reported	0	.8
104	Bowdle	330	1	"	.4	1.4
105	Herreid	326	.7	"	0	.7
106	Alexandria	322	1	"	0	1
107	Egan	321	1	"	0	1
108	Hill City	313	.7	"	0	.7
109	Roscoe	311	.6	"	0	.6
110	Plankington	309	1	"	0	1
111	Veblen	305	.7	"	0	.7
112	Tripp	303	1	"	0	1
206	Claremont	111	.5	None reported	0	.5
207	Vivian	110	1	"	0	1
208	Worthing	106	1	"	0	1
209	Glenham	103	1	"	0	1
210	Volin	102	.33	"	0	.33
211	Oelrichs	93	.33	"	0	.33
212	Witten	89	.5	"	0	.5
213	Interior	75	.5	"	0	.5
214	Bison	72	1	"	0	1
215	Fairview	39	.8	"	0	.8

designated as assistant superintendent. Since median-sized districts often used the term assistant superintendent for the only central administration helper for the superintendent, this position showed up as frequently in districts with 700 to 1,000 students as in those districts with 10,000 or more!

Numbers of secretaries for administration, special services, and educational supervisors followed the now familiar pattern of larger numbers in all three categories in the largest ten schools, and almost none in the classifications of special services or educational supervisors when median- or smallest-ten strata were considered (Tables 12-13). No secretarial data were available for South Dakota.

Per pupil costs of special services and educational supervisors are shown in Tables 14-16. Because these services were seldom provided in smaller districts the cost pattern is reversed. Small districts, having few or no supervisors and special services personnel, had no costs. Large districts generally had per pupil costs for supervision and special services which amounted to fifty or seventy-five per cent of the total administrative expenditure per pupil. In the few instances when median-sized districts had supervisors and special services personnel, the district's per pupil costs were higher than those of schools in the top ten classification.

Per pupil costs for secretaries

The computerized system of reporting used in Iowa and a special mail questionnaire to the superintendents of districts involved afforded a careful look at the per pupil costs of central administration secretarial services. As was true of certified and professional employees, the highest per pupil costs were associated with general administration (Table 17), special services costs were second (Table 18), and per pupil costs for educational supervisors' secretaries were least (Table 19).

Although not too meaningful because of the numbers of schools reporting "no expenditures" for the various secretarial classification, the mean per pupil expenditures by size classification are reported in the following open-faced table.

Average per pupil costs for general administration, educational supervisors' and special services' secretaries in Iowa, 1965-1966.

	Secretarial Mean per pupil costs		
	General Admin.	Education Supervisors	Special Services
District Classification			
Largest Ten	$ 2.39	$ .81	$1.75
Median Ten	7.31	5.54	3.01
Smallest Ten	10.89	.00	.00

Board of Education Costs

Iowa's accounting and reporting procedures provided an opportunity to examine per pupil costs for operations of the board of education and for board secretaries. Once again larger districts had generally lower per pupil costs, although the distribution varied much more than those of other central administration expenditures.

Table 12. Secretaries serving administrators, educational supervisors, and special service personnel of large, median, and small districts in Iowa, 1965-1966.

Rank	District	Enrollment	Number of Secretaries			
			Admin.	Spec. Ser.	Ed. Super.	Total
1	Des Moines	44,954	6	70	10	86
2	Cedar Rapids	23,596	5	3	9	17
3	Davenport	21,592	-	-	-	-
4	Waterloo	19,469	5	4	6	15
5	Sioux City	18,324	12	2	5	19
6	Council Bluffs	15,252	9	1	2	12
7	Dubuque	8,861	9	11	2	22
8	Ottumwa	8,199	2	2	1	5
9	Iowa City	7,870	2	0	2	4
10	Fort Dodge	7,812	15	3	1	19
238	Beaman-Conrad	723	2	1	0	3
239	Holstein	722	1	1	2	4
240	Turkey Valley	719	3	0	0	3
241	Montezuma	717	1	0	0	1
242	Eastwood	714	2	1	0	3
243	Adair-Casey	713	4	0	0	4
244	Buffalo Center	708	1	0	0	1
245	Twin Cedars	708	1	0	0	1
246	H.L.V.	707	1	0	0	1
247	Underwood	705	1	0	0	1
446	Diagonal	261	1	0	0	1
447	Ayrshire	261	1	0	0	1
448	Marathon	243	-	-	-	-
449	Garrison	237	.5	-	-	.5
450	Palmer	236	-	-	-	-
451	New Providence	235	0	0	0	0
452	Steamboat Rock	231	1	0	0	1
453	A.C.L.	226	1	0	0	1
454	Rake	211	1	0	0	1
455	Rembrandt	195	-	-	-	-

Table 13. Secretaries serving administrators, educational supervisors, and special service personnel of large, median, and small districts in Missouri, 1965-1966.

Rank	District	Enrollment	Number of Secretaries			
			Admin.	Spec. Ser.	Ed. Super.	Total
1	St. Louis	123,733	22	68	16.5	106.5
2	Kansas City	79,835	8	60.5	20	88.5
3	Springfield	23,805	4	13	3	20
4	Ferguson	16,795	14	1	1	16
5	St. Joseph	16,489	10	0	0	10
6	Raytown	15,790	4	2	2	8
7	Independence	14,955	5	2	0	7
8	Ritenour	14,677	9	0	0	9
9	Hazelwood	14,536	28	5	2	35
10	Hickman Mills	12,682	7	0	0	7
238	Albany	749	2	0	0	2
239	Qulin	710	1	0	0	1
240	Milan	706	1	0	0	1
241	Laddonia	697	1	0	0	1
242	Elsberry	693	1	0	0	1
243	North Platte	680	1	0	0	1
244	Rich Hill	668	2	0	0	2
245	Conway	667	2	0	0	2
246	Rock Port	662	1	0	0	1
247	Canton	650	1	0	0	1
476	Hermitage	142	1	0	0	1
477	Williamstown	139	1	0	0	1
478	Dadeville	133	1	0	0	1
479	Gorin	128	2	0	0	2
480	Wyaconda	119	1	0	0	1
481	Coffey	109	1	0	0	1
482	Wheeling	108	1	0	0	1
483	Ravanna	105	1	0	0	1
484	Martinsville	97	1	0	0	1
485	Ethel	96	1	0	0	1

Table 14. Per pupil cost for educational supervisors and special services personnel of large, median, and small districts in Iowa, 1965-1966.*

Rank	District	Enrollment	Per Pupil Cost: Spec. Serv. Person. Total cost	Spec. Serv. Person. Per pupil cost	Ed. Super. Person. Total cost	Ed. Super. Person. Per pupil cost
1	Des Moines	44,954	$705,365	$15.69	$421,173	$ 9.37
2	Cedar Rapids	23,596	376,746	15.97	243,695	10.33
3	Davenport	21,592	-	-	-	-
4	Waterloo	19,469	148,488	7.63	290,638	14.93
5	Sioux City	18,324	220,119	12.02	164,236	8.96
6	Council Bluffs	15,252	81,596	5.35	146,438	9.60
7	Dubuque	8,861	135,981	15.35	116,314	13.13
8	Ottumwa	8,199	103,497	12.62	82,865	10.23
9	Iowa City	7,870	0	0	17,853	2.27
10	Fort Dodge	7,812	74,056	9.48	163,739	20.96
238	Beaman-Conrad**	723	15,000	20.75	103,850	143.64
239	Holstein	722	16,300	22.58	15,920	22.05
240	Turkey Valley	719	10,583	14.72	6,512	9.06
241	Montezuma	717	15,000	20.92	0	0
242	Eastwood	714	30,499	42.72	6,760	9.47
243	Adair-Casey	713	16,500	23.14	0	0
244	Buffalo Center	708	10,275	14.51	0	0
245	Twin Cedars	708	10,950	15.47	0	0
246	H.L.V.	707	0	0	1,350	1.91
247	Underwood	705	13,700	19.43	10,100	14.33
446	Diagonal	261	0	0	0	0
447	Ayrshire	261	2,000	7.66	0	0
448	Marathon	243	-	-	-	-
449	Garrison	237	830	3.50	1,715	7.24
450	Palmer	236	-	-	-	-
451	New Providence	235	0	0	0	0
452	Steamboat Rock	231	5,800	25.11	0	0
452	A.C.L.	226	0	0	0	0
454	Rake**	211	0	0	41,110	195.36
455	Rembrandt	195	-	-	-	-

*Includes all secretarial costs.

**District has included some classroom teachers' salaries in Educational Supervisors' budget.

Table 15. Per pupil cost for educational supervisors and special services personnel of large, median, and small districts in Missouri.

Rank	District	Enrollment	Per Pupil Cost			
			Spec. Serv. Person.		Ed. Super. Person.	
			Total cost	Per pupil cost	Total cost	Per pupil cost
1	St. Louis	123,733	$653,320	$ 5.28	$1,332,826	$10.77
2	Kansas City	79,835	867,983	10.87	662,220	8.30
3	Springfield	23,805	77,508	3.26	164,689	6.92
4	Ferguson	16,795	83,850	4.99	72,000	4.29
5	St. Joseph	16,489	43,200	2.62	40,500	2.46
6	Raytown	15,790	190,000	12.03	13,000	.82
7	Independence	14,955	30,715	2.05	52,238	3.49
8	Ritenour	14,677	82,861	5.92	0	0
9	Hazelwood	14,536	36,628	2.52	45,863	3.16
10	Hickman Mills	12,682	0	0	70,547	5.56
238	Albany	749	0	0	0	0
239	Qulin	710	0	0	0	0
240	Milan	706	0	0	6,725	9.53
241	Laddonia	697	0	0	0	0
242	Elsberry	693	0	0	13,376	19.30
243	North Platte	680	0	0	0	0
244	Rich Hill	668	0	0	0	0
245	Conway	667	9,600	14.39	10,400	15.59
246	Rock Port	662	0	0	0	0
247	Canton	650	0	0	5,005	7.70
476	Hermitage	142	0	0	0	0
477	Williamstown	139	0	0	0	0
478	Dadeville	133	0	0	0	0
479	Gorin	128	0	0	0	0
480	Wyaconda	119	0	0	0	0
481	Coffey	109	0	0	0	0
482	Wheeling	108	0	0	0	0
483	Ravanna	105	0	0	0	0
484	Martinsville	97	0	0	0	0
485	Ethel	96	0	0	0	0

Table 16. Per pupil cost for educational supervisors of large, median, and small districts in South Dakota, 1965-1966.*

Rank	District	Enrollment	Educational Supervisors	
			Total Cost	Per Pupil Cost
1	Sioux Falls	18,114	$155,834	$ 8.60
2	Rapid City	13,369	72,758	5.44
3	Averdeen	5,697	17,179	2.88
4	Huron	3,980	9,577	2.41
5	Douglas	3,894	6,496	1.67
6	Watertown	2,781	44,027	11.64
7	Mitchell	2,915	0	0
8	Brookings	2,855	3,313	1.16
9	Pierre	1,763	0	0
10	Yankton	1,595	70	.03
103	Armour	331	0	0
104	Bowdle	330	0	0
105	Herreid	326	6,628	20.33
106	Alexandria	322	0	0
107	Egan	321	0	0
108	Hill City	313	0	0
109	Roscoe	311	0	0
110	Plankington	309	0	0
111	Veblen	305	4,867	15.96
112	Tripp	303	0	0
206	Claremont	111	0	0
207	Vivian	110	0	0
208	Worthing	106	0	0
209	Glenham	103	0	0
210	Volin	102	1,100	10.78
211	Oelrichs	93	0	0
212	Witten	89	0	0
213	Interior	75	2,940	39.20
214	Bison	72	0	0
215	Fairview	39	0	0

*Costs for Special Services Personnel not available in South Dakota.

Table 17. Per pupil cost for general administration secretaries of large, median, and small districts in Iowa, 1965-1966.

Rank	District	Enrollment	No. Sec.	Total Cost	Per Pupil Cost
1	Des Moines	44,954	6	$25,580	$ .57
2	Cedar Rapids	23,596	5	22,994	.98
3	Davenport	21,592	-	-	-
4	Waterloo	19,469	5	24,119	1.24
5	Sioux City	18,324	12	52,821	2.88
6	Council Bluffs	15,252	9	34,170	2.24
7	Dubuque	8,861	9	38,778	4.38
8	Ottumwa	8,199	2	11,575	1.41
9	Iowa City	7,870	2	10,650	1.35
10	Fort Dodge	7,812	15	49,690	6.36
223	Beaman-Conrad	723	2	6,000	8.30
224	Holstein	722	1	4,200	5.82
225	Turkey Valley	719	3	8,878	12.35
226	Montezuma	717	2	5,800	8.09
227	Eastwood	714	3	6,710	9.40
228	Adair-Casey	713	4	6,730	9.44
229	Buffalo Center	708	1	3,900	5.51
230	Twin Cedars	708	1	2,400	3.39
231	H.L.V.	707	1	4,600	6.51
232	Underwood	705	1	3,000	4.26
446	Diagonal	261	1	*	-
447	Ayrshire	261	1	2,700	10.35
448	Marathon	243	-	-	-
449	Garrison	237	.5	1,303	5.50
450	Palmer	236	-	-	-
451	New Providence	235	0	0	0
452	Steamboat Rock	231	1	3,000	12.99
453	A.C.L.	226	1	4,400	19.47
454	Rake	211	1	1,298	6.15
455	Rembrandt	195	-	-	-

*Secretary listed but no salary reported.

Table 18. Per pupil cost for special services secretaries of large, median, and small districts in Iowa, 1965-1966.

Rank	District	Enrollment	No. Sec.	Total Cost	Per Pupil Cost
1	Des Moines	44,954	70	$226,642	5.93
2	Cedar Rapids	23,596	3	9,576	.41
3	Davenport	21,592	-	-	-
4	Waterloo	19,469	4	16,738	.86
5	Sioux City	18,324	2	6,500	.36
6	Council Bluffs	15,252	1	3,120	.21
7	Dubuque	8,861	11	33,780	3.81
8	Ottumwa	8,199	2	9,595	1.17
9	Iowa City	7,870	0	0	0
10	Fort Dodge	7,812	3	9,752	1.24
223	Beaman-Conrad	723	1	2,000	2.77
224	Holstein	722	1	2,000	2.77
225	Turkey Valley	719	0	0	0
226	Montezuma	717	0	0	0
227	Eastwood	714	1	2,497	3.50
228	Adair-Casey	713	0	0	0
229	Buffalo Center	708	0	0	0
230	Twin Cedars	708	0	0	0
231	H.L.V.	707	0	0	0
232	Underwood	705	0	0	0
446	Diagonal	261	1	*	-
447	Ayrshire	261	0	0	0
448	Marathon	243	-	-	-
449	Garrison	237	0	0	0
450	Palmer	236	-	-	-
451	New Providence	235	0	0	0
452	Steamboat Rock	231	0	0	0
453	A.C.L.	226	0	0	0
454	Rake	211	0	0	0
455	Rembrandt	195	-	-	-

*Secretary listed but no salary reported.

Table 19. Per pupil cost for educational supervisors' secretaries of large, median, and small districts in Iowa, 1965-1966.

Rank	District	Enrollment	No. Sec.	Total Cost	Per Pupil Cost
1	Des Moines	44,954	10	$42,258	.94
2	Cedar Rapids	23,596	9	24,393	1.03
3	Davenport	21,592	-	-	-
4	Waterloo	19,469	6	24,892	1.28
5	Sioux City	18,324	5	17,912	.98
6	Council Bluffs	15,252	2	6,280	.41
7	Dubuque	8,861	2	5,673	.64
8	Ottumwa	8,199	1	4,201	.51
9	Iowa City	7,870	2	8,253	1.05
10	Fort Dodge	7,812	1	3,120	.40
223	Beaman-Conrad	723	0	0	0
224	Holstein	722	2	4,000	5.54
225	Turkey Valley	719	0	0	0
226	Montezuma	717	0	0	0
227	Eastwood	714	0	0	0
228	Adair-Casey	713	0	0	0
229	Buffalo Center	708	0	0	0
230	Twin Cedars	708	0	0	0
231	H.L.V.	707	0	0	0
232	Underwood	705	0	0	0
446	Diagonal	261	0	0	0
447	Ayrshire	261	0	0	0
448	Marathon	243	-	-	-
449	Garrison	237	0	0	0
450	Palmer	236	-	-	-
451	New Providence	235	0	0	0
452	Steamboat Rock	231	0	0	0
453	A.C.L.	226	0	0	0
454	Rake	211	0	0	0
455	Rembrandt	195	-	-	-

Table 20. Per pupil cost for board of education and board secretaries of large, median, and small districts in Iowa, 1965-1966.

Rank	District	Enrollment	Board and Sec. Cost	Per Pupil Cost
1	Des Moines	44,954	$ 51,710	$ 1.15
2	Cedar Rapids	23,596	121,206	5.14
3	Davenport	21,592	64,503	2.99
4	Waterloo	19,469	8,466	.44
5	Sioux City	18,324	13,429	.73
6	Council Bluffs	15,252	36,413	2.40
7	Dubuque	8,861	7,705	.87
8	Ottumwa	8,199	29,715	3.64
9	Iowa City	7,870	190,982	24.20
10	Fort Dodge	7,812	37,102	4.70
223	Beaman-Conrad	723	4,279	5.90
224	Holstein	722	4,252	5.88
225	Turkey Valley	719	4,541	6.30
226	Montezuma	717	4,980	6.85
227	Eastwood	714	48,270*	67.50
228	Adair-Casey	713	5,647	7.91
229	Buffalo Center	708	3,155	4.45
230	Twin Cedars	708	5,944	8.40
231	H.L.V.	707	2,672	3.78
232	Underwood	705	4,736	6.70
446	Diagonal	261	2,050	7.85
447	Ayrshire	261	2,702	10.30
448	Marathon	243	5,691	23.42
449	Garrison	237	2,170	9.17
450	Palmer	236	4,499	19.00
451	New Providence	235	1,864	7.90
452	Steamboat Rock	231	535	2.31
453	A.C.L.	226	3,708	16.30
454	Rake	211	1,799	8.50
455	Rembrandt	195	2,177	11.11

*This item inadvertently contains IPERS and FICA payments for all employees for the Eastwood district for 1965-1966.

PART THREE

Summary

The general problem of this investigation was the determination and analysis of costs for central administration of public school districts in South Dakota, Iowa and Missouri. Financial reports to the state education agency for the school year 1965-1966 were examined from thirty school districts in each state. Districts selected were the ten largest, ten clustered around the median district size, and the ten smallest.

1. "What were the costs of school district central administration excluding costs of administering attendance units?"

Tables 2 through 4 contain total and per pupil costs of general administration for the 90 districts studied. Of course, total dollars expended were greatest in large enrollment districts; however, as district enrollments dropped, per pupil costs increased rapidly. Larger districts in Iowa and South Dakota spent more per pupil for general administration; when small districts were considered, the per capita costs for administration was greatest in Missouri.

2. "What were the component costs of district central administration?"

Total costs for central administration (Tables 6-8) were found to include expenditures for the board of education and board secretary, superintendent and assistants, business manager and assistants, educational supervisors, special services personnel, and clerks and secretaries assigned to each of these areas. Large districts generally spent more for special services than supervision, and a still smaller amount for general administration. Median sized districts spent more dollars for general administration than for special services or educational supervisors. The small districts of each state spent almost nothing for special services and the total allotted to general administration would seldom equal the superintendent's salary, indicating a secondary assignment such as teaching.

3. "How do these costs vary per capita (Per Pupil) among districts and between states?"

Per capita expenditures for both general administration and total central administration varied inversely with district enrollment. Per pupil costs for general administration were least in large districts, considerably higher in median sized districts and, on the average, had increased three- to ten-fold among the smallest ten schools. Generally speaking, South Dakota schools had the lowest per pupil expenditures for general administration followed by Iowa and Missouri. (Table 5).

Per capita expenditures for total central administration also varied inversely with the size of district; however, the addition of costs for special services and educational supervisors tended to reduce the range of per pupil costs. Larger districts still had a significant per pupil economy, e.g., the Iowa mean per-pupil costs by size classification were $35.35 for the largest ten districts, $78.88 for median districts and $73.55 for the smallest ten districts. Interstate comparisons of total central administration costs were possible only for Iowa and Missouri because secretarial and special services costs were not available for South Dakota. Missouri costs generally were slightly lower in each size classification.

4. "What is the relationship of district central administration services offered to district size?"

Small- and median-sized districts did not have the services of educational supervisors or personnel assigned to special services (Tables 9-11). Districts with 10,000 or more students spent more money for supervision and special services than for general administration. Districts of median size or smaller spent most of their total administrative budget on superintendents, assistants, and secretaries.

5. "Insofar as can be determined, does efficiency (i.e., reduction of per pupil costs) continue to increase as district enrollments mount or is there an administrative over-burden present in very large districts which diminishes administrative economy?"

Inspection of tables 2-4 and 6-8 revealed no evidence of administrative over-burden in very large districts. Each of the three states has one or more relatively large districts (Des Moines, St. Louis, Kansas City, Sioux Falls). Invariably these districts had the greatest number of administrative, supervisory, and special services personnel among the ten districts in their size classification. Nonetheless these "super districts" consistently had lower per pupil costs than the bulk of the districts sampled. If over-burden does indeed occur in very large districts, the districts studied were not large enough to demonstrate this phenomena.

6. "Is a broad range of administrative services generally available to all districts or are special services, educational supervisors, and administrative specialists found only in larger districts--in high cost districts?"

No! Only the larger districts included in this study offered a broad range of administrative services, and because these were three states having mostly small communities and school districts, even some of the districts in the top ten classification had fewer than 5,000 students and rather limited services. Obviously, however, if two districts have about the same enrollment and one employs many more supervisors, administrators, and special services personnel, that district will have higher per pupil costs for total central administration.

Conclusions and Recommendations

Several assumptions and limitations of this study should be called to mind in evaluating the findings and the conclusions. First, a sample of thirty districts was used--a sample selected to show contrasts, not a random sample of all districts. Second, numbers of personnel reported are on a "school year basis" while financial reporting was on ' "fiscal year basis". The net effect was to over-report budgeted amounts in terms of staff and probably in terms of enrollments. Third, the services of county and other intermediate educational agencies are not considered. In all fairness, these agencies can and, in some instances, probably do make up for the lack of supervisors and special service workers in small districts.

Finally, when considering school district reorganization two factors generally predominate--effectiveness and efficiency. Effectiveness is usually expressed in terms of the adequacy of the educational program, while efficiency is expressed in terms of getting the most for the tax dollar. This research has been concerned with both effectiveness and efficiency; however, no evaluation has been made of the educational quality of any of the administrative quality of any of the admin-

istrative quality of any of the administrative services examined. The study dealt with the educational opportunities provided to pupils in attendance units by the present administrative districts and the costs involved.

The following conclusions and recommendations seem warranted and in keeping with the limitations and findings of the investigation:

1. The tables in the findings section of this report which deal with salaries of administrative personnel and salaries of supervisory and special services employees definitely show that many small- and median-sized districts are not as effectively operated, either from the economic point of view or from a consideration of opportunities for effective educational program, as are large districts.

2. Assuming total educational costs of 500 to 600 tax dollars per child per year, administration of small districts is taking too big a slice, 80 to 100 dollars per child instead of the 10 to 20 dollars of a large district.

3. The high per pupil costs of small districts were not a function of excessive salaries. Generally, only a superintendent was employed and the salary amounts were modest for this position in small and median districts.

4. In addition to having lower per pupil costs, it would appear that larger districts obtain the services of better, more qualified personnel. For example, Iowa's top ten districts had nine superintendents with doctorates, the superintendents of the median-sized districts held master's degrees and were in their forties, the superintendents of the smallest districts generally had the least formal preparation and were very young or nearing retirement age.

5. If the assumption is made that educational supervisors and special services personnel are necessary for an effective school educational program then these three states need larger school districts.

6. Perhaps it is impossible to say just how large the pupil enrollment should be in any given school district; however, the data presented in this report show that it is expensive to operate schools with small enrollments. For example, only one of the thirty large districts studied expended as much per pupil for administration salaries as the average per pupil expenditure of median-sized districts.

7. The tables in this report do give some indication regarding the size of a school district and the services available from the central administration. Below 3,000 students few districts had more than one or two supervisors and half a dozen special services employees. Median-sized districts of these states had almost no supervisors and very few special services personnel. Districts in the "smallest ten" classification had almost no central administration employees other than the superintendent--who often was devoting only part of his time to administration.

8. Reorganizing the smallest districts so that the bulk have enrollments equal to the present state medians would not suffice, even though this would mean a ten-fold increase for the smallest districts. These states have median enrollments so small and, of course, half the districts so small, that grass roots reorganization with one small community joining with one or two others would be practically meaningless to administrative efficiency and effectiveness as measured by this investigation.

9. To obtain the kinds of per pupil economy and the availability of special services and supervisory personnel found to be possible (and deemed desirable), mergers would be needed which would result in total K-12 enrollments of at least three to five thousand.

10. Considering only the administrative aspects, the adjacent-town type of traditional school district merger really holds little promise for obtaining the district size necessary for the economies needed. The process would take too long and would of necessity involve too many communities with too many local interests and too much built-in resistance to change. Intermediate- and county-type agencies could provide services missing, but these tend to add another layer of administrative costs to the existing expensive small-district pattern.

11. It is recommended that, in each of the three states, more authority be given by law to the state education agency to plan and direct reorganization of all school districts. With this authority for change should be given suitable power for forcing compliance, such as the power to reduce or withhold state aid.

The new basic administrative school districts should have a minimum of 3,000 to 5,000 pupils in these three states. Larger districts would be desirable--20,000 or more--wherever such enrollments can reasonable be combined.

Finally, a plea must be made for more cost analysis of educational services. Per capita or per pupil costs have no unique magic--but they do provide a very interesting, if seldom used, research tool for evaluating educational inputs and economies. Educators seldom use more than the gross figure of annual cost-per-child because present accounting and reporting procedures almost totally block a more careful scrutiny. These blocks can be removed.

Public school leaders, university-based researchers, and state legislative research bureaus should use, and encourage the use of, per-pupil cost comparisons. The present writers are convinced that this move would do much to promote the kind of "healthy dissatisfaction" with the status quo of district organization; a dissatisfaction needed to trigger a massive, state-wide change in the basic administrative structure of our public schools.

Data Sheet

ID 1-3	Section 4	State Code 5	School Number 6-10	District Name 11-30	District Type 31	County Number 32-34	Full time Enrollment K-12 35-41	District Enrollment 9-12 42-46

Number of Administrators 47-48	Administrative Secretaries 49-50	Special Service Personnel 51-52	Special Service Secretaries 53-54	Educational Supervisors 55-56	Educational Supervisors Secretaries 57-58

Cost Board and Board Secretaries 59-64	Cost Supt. and Assistant 65-71	Cost Bus Manager 72-78	Total Administrative Cost 31-39	Cost Special Services Personnel 40-46

Cost Educational Supervisor 47-53	Rank in Size 54-56	